

said further terminal by further re-transmitting said communication signal according to a pre-selected procedure after a predetermined time period which is at least equal to said time interval needed for that further terminal to wake up; and

providing to said network said communication signal in response to said further instructing by said further re-transmitting said communication signal according to said pre-selected procedure.

19. The terminal of claim **13**, wherein said communication application is a universal plug and play application, said protocol stack is a TCP/IP stack and there is a connection established between the terminal and the further terminal before receiving by said terminal said notification and a socket is already created by said universal plug and play application in the TCP/IP stack of the terminal for communicating with said further terminal, and wherein before providing to said network by said terminal said communication signal, said universal plug and play application is configured to provide:

setting in said TCP/IP stack a socket option SO-SNDTIMEO defining a time limit for sending said communication signal by said terminal, and a socket option SO-RCVTIMEO defining a time limit for receiving data from said further terminal; and

instructing said TCP/IP stack to send said pocket signal to said further terminal.

20. The terminal of claim **19**, wherein said protocol stack is configured to provide communication signal to said network in response to said instruction, said communication signal is a data communication signal containing data sent to said further terminal, said acknowledgement is an acknowledgement of successfully receiving said data communication signal by said further terminal and said time interval is defined by said time limit defined by said socket option SO-SNDTIMEO.

21. The terminal of claim **20**, wherein said further terminal after receiving said data communication signal from the terminal is configured to send a further data communication signal to said terminal and said terminal is configured to receive said further data communication signal if said time limit defined by said socket option SO-SNDTIMEO for said receiving data from said further terminal is not expired.

22. The terminal of claim **13**, wherein operations performed on or by said protocol stack are facilitated by a Berkeley software distribution socket application programming interface.

23. A communication system, comprising:

a further terminal being a power saving mode, responsive to a wake up call;

a terminal, responsive to a notification about a power saving mode of the further terminal, configured to provide a communication signal intended for said further terminal by transmitting said communication signal according to a pre-selected procedure for providing communicating in a power constrained environment, configured to provide instructions for a predetermined criterion defining a waiting period for receiving an acknowledgement of receiving said communication signal by said further terminal after said further terminal is woken up, wherein said waiting period is at least as long as a time interval needed for that further terminal to wake up;

a network, configured to provide said notification, configured to provide said wake up call for waking up said further terminal in response to said communication signal, configured to facilitate sending signals between said terminal and said further terminal,

wherein a universal plug and play application is available in said terminal and said further terminal.

24. A method, comprising:

receiving by a terminal a notification about a power saving mode of a further terminal;

providing to a network by a protocol stack of said terminal a communication signal intended for said further terminal by transmitting said communication signal according to a pre-selected procedure for communicating with said further terminal through said network in a power constrained environment using a communication application available in said terminal and said further terminal;

detecting said communication signal and starting a wake-up process of said further terminal in response to said communication signal; and

receiving, after said further terminal is woken up, said communication signal by said further terminal and sending an acknowledgement of receiving said communication signal to said terminal by said further terminal, wherein said terminal waits for said acknowledgement at least for a time interval needed for that further terminal to wake up before terminating said communicating based on a predetermined criterion facilitated by a communication application of the terminal.

25. The method of claim **24**, wherein said power saving mode is a sleeping mode.

26. The communication system of claim **23**, wherein said terminal or the further terminal is a mobile terminal, a wireless device, a portable device, a mobile communication device or a mobile phone.

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